



## Questions about solderability...

? What is solderability?

A Solderability refers to how easy a metal is to solder to.

Some metals like copper and tin are easy to solder to. Other metals like brass and steel are difficult to solder to. Please refer to the metals solderability chart at the bottom of this section.

When a metal oxidizes it becomes harder to solder. Due to oxidation, an easy to solder metal can become hard to solder. Kester makes products to remove the oxidation off different metal surfaces (i.e. Copper-Nu, Nickel-Nu, Solder-Nu).

? We are doing die attach to a gold surface. What kind of solder do we need?

A Gold will dissolve in standard tin-lead solders. If there is too much gold, the joint will become brittle due to the tin/gold intermetallics.

For people soldering to solid gold, such as in die attach, they need a gold bearing solder. We do not have gold bearing solders.

? We are soldering to gold and we heard that we need a silver solder. Is this true?

A This is a common misconception. You need a small amount of silver in your solder if you are soldering to silver. The two most common situations are silver plating on component leads and silver palladium substrates. In both these cases the Sn62 alloy should be used.

## Metal Solderability Chart & Flux Selector Guide

Metal Surfaces	Solderability	No Clean Fluxes	Non-Activated Rosin Fluxes	Mildly Activated Rosin Fluxes	Fully Activated Rosin Fluxes	Organic Fluxes Water Soluble	Inorganic Fluxes Water Soluble
Platinum Gold Copper Tin Solder Palladium Silver	Easy to Solder	958 959	135	186 186-18	1544 1588	2235	Not Recommended for Electrical Soldering
Nickel Brass	Less Easy to Solder					1429	715
Cadmium Lead Bronze						2331-ZX	
Rhodium Beryllium Copper							
Nickel-Iron KovarI	Difficult to Solder						
Zinc Mild Steel Chromium Inconel Monel Stainless Stee	Very Difficult To Solder						817 3350